

IN THE CLAIMS

Claims 1-39 (cancelled)

Claim 40 (currently amended): A fusion protein comprising a selenocysteine-containing peptide ~~covalently linked to~~ fused to a surface-protein ~~positioned~~ displayed on an amplifiable genetic particle.

Claim 41 (currently amended): A fusion protein of claim 40, wherein the amplifiable genetic particle is selected from a phage, ~~a polysome~~, a virus, a cell or a spore.

Claim 42 (currently amended): A fusion protein according to claim 40, wherein the selenocysteine-containing peptide is a recombinant protein ~~wherein~~ such that the selenocysteine ~~and is located~~ incorporated at a ~~predetermined specific~~ , distance from unique site.

Claim 43 (currently amended): A fusion protein according to claim 40, wherein the covalent linkage between the selenocysteine-containing peptide and the surface protein is ~~comprises~~ a native peptide bond.

Claim 44 (currently amended): A fusion protein according to claim 40, wherein the peptide is expressed by a DNA having a TGA codon and ~~part or all of a~~ a selenocysteine insertion sequence.

Claim 45 (currently amended): A fusion protein according to claim 44, wherein the selenocysteine insertion sequence is located ~~adjacent to one or more nucleotides from~~ downstream of the TGA codon.

Claim 46 (withdrawn): A fusion protein according to claim 42, wherein the selenocysteine is flanked on either or both sides by one or more randomized amino acid.

Claim 47 (withdrawn): A fusion protein according to claim 40, wherein the selenocysteine in the peptide is positioned adjacent to one side of one or more randomized amino acids, the one or more randomized amino acids being flanked on a second side by a cysteine.

Claim 48 (currently amended): A fusion protein according to claim 44, wherein the selenocysteine insertion sequence is obtained from a amplifiable genetic particle selected from the group consisting of eubacteria, eukarya and archea.

Claim 49 (withdrawn): A fusion protein according to claim 40, wherein the selenocysteine in the peptide is capable of chemical derivatization of the selenol group.

Claim 50 (withdrawn): A fusion protein according to claim 49, wherein the chemical derivatization results from a nucleophilic substitution reaction.

Claim 51 (withdrawn): A fusion protein according to claim 49, wherein the chemical derivatization results from an oxidation reaction.

Claim 52 (withdrawn): A fusion protein according to claim 49, wherein the chemical derivatization results from a metal coordination reaction.

Claim 53 (withdrawn): A fusion protein according to claim 49, wherein a product of chemical derivatization of the selenocysteine in the peptide is a chemical functionality selected from the group consisting of enzyme substrates, enzyme cofactors, enzyme inhibitors, receptor ligands and cytotoxic agents.

Claim 54 (withdrawn): A fusion protein according to claim 42 wherein the selenocysteine-containing peptide further comprises an enzyme substrate or is modified at the selenocysteine to form an enzyme substrate.

Claim 55 (withdrawn): A fusion protein according to claim 54, wherein the enzyme substrate forms a reaction product in the presence of an enzyme and the enzyme substrate is located on the surface of the amplifiable genetic particle.

Claim 56 (withdrawn): A fusion protein of claim 55, wherein the reaction product is capable of binding to an affinity substrate.

Claim 57 (withdrawn): A fusion protein, according to claim 55, wherein the recombinant protein is selected from a library of variants of a single enzyme, wherein each variant contains one or more amino acid substitutions relative to the native enzyme.

Claim 58 (withdrawn): A fusion protein according to claim 55, wherein the recombinant protein is selected from an expressed c-DNA library.